Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. - 29. (Cancelled)

30. (Currently Amended) An ~~exposure method using a projection exposure apparatus constructed to expose patterns of a mask onto an exposed member through a projection optical system by moving a movable optical member for changing incident angles of illumination luminous fluxes on said mask in an illumination optical system, said~~ exposure method comprising:

~~a first step of: starting the exposure in a state where said movable optical member is set in a first position;~~

~~a second step of switching said movable optical member from said first position to a predetermined second position different from said first position after irradiating said mask with a predetermined quantity of luminous fluxes or for a predetermined period;~~

~~a light shielding step of shielding the illumination light during said switching process; and~~

~~a step of finishing the irradiation of said mask with the luminous fluxes just when an exposure quantity given to said exposed member reaches a predetermined value upon setting said movable optical member to said first and second positions, respectively~~

illuminating a pattern with light from an optical member provided in an illumination optical system, said optical member being arranged at a first position on a plane perpendicular to an optical axis of the illumination optical system;

switching said optical member from said first position to a second position on said plane different from said first position to change an incidence angle of light on said pattern from

said optical member, said first and second positions being determined so that a 0-order diffracted beam and one non-0-order diffracted beam produced from said pattern are substantially symmetrical with respect to said optical axis; and

illuminating said pattern with light from said optical member arranged at said second position, wherein said pattern is illuminated with light from said optical member arranged at said first and second positions alternately until a total amount of light reaching a substrate exposed with said illuminated pattern is a predetermined amount of exposure.

31. - 41. (Cancelled)

42. (New) An imaging method for imaging a fine pattern having linear features extending along orthogonal first and second directions, said method comprising:

providing a light source having decreased intensity portions at a center thereof and on first and second axes defined to intersect with each other at the center and defined along the first and second directions, respectively; and

illuminating the pattern with light from the light source.

43. (New) A method according to claim 42, wherein the intensity at each decreased intensity portion is decreased to about zero.

44. (New) A method according to claim 42, wherein the light source comprises four sections having substantially the same light intensity and being distributed in four quadrants defined by the center and the first and second axes, and wherein the four sections are disposed in an angularly symmetrical relationship with respect to the center.

45. (New) A method according to claim 44, wherein the intensity at each decreased intensity portion is decreased to about zero.

46. (New) A method according to any one of claims 42-45, wherein the light source is provided by light from one of a lamp and a laser.

47. (New) In a microdevice manufacturing method including a step for imaging on a workpiece a fine pattern having linear features extending along orthogonal first and second directions to print the fine pattern on the workpiece, the improvements comprising:

providing a light source having decreased intensity portions at a center thereof and on first and second axes defined to intersect with each other at the center and defined along the first and second directions, respectively; and

illuminating the pattern with light from the light source.

48. (New) A method according to claim 47, wherein the intensity at each decreased intensity portion is decreased to about zero.

49. (New) A method according to claim 47, wherein the light source comprises four sections having substantially the same light intensity and being distributed in four quadrants defined by the center and the first and second axes, and wherein the four sections are disposed in an angularly symmetrical relationship with respect to the center.

50. (New) A method according to claim 49, wherein the intensity at each decreased intensity portion is decreased to about zero.

51. (New) A method according to any one of claims 47-50, wherein the light source is provided by ultraviolet light from one of a mercury lamp and an excimer laser.

52. (New) In a method of imaging a fine pattern having linear features extending in orthogonal first and second directions, wherein the pattern is illuminated with light obliquely with respect to the pattern, the improvements residing in that:

the strength of illumination of the pattern in a first plane of incidence including the first direction and the strength of illumination of the pattern in a second plane of incidence including the second direction are made lower than that in a third plane of incidence other than the first and second planes.

53. (New) A method according to claim 52, wherein, in each of the first plane of incidence and the second plane of incidence, the illumination of the pattern with light is substantially blocked.

54. (New) A method according to claim 52 or 53, wherein the predetermined plane of incidence is defined with an angle of about 45 degrees with respect to one of the first plane of incidence and the second plane of incidence.

55. (New) In a method of manufacturing microdevices wherein a fine pattern having linear features extending in orthogonal first and second directions is illuminated with light obliquely with respect to the pattern and wherein the illuminated pattern is imaged and printed on a workpiece, the improvements residing in that:

the strength of illumination in a predetermined plane of incidence is made greater than that in a first plane of incidence including the first direction and that in a second plane of incidence including the second direction and intersecting with the first plane of incidence perpendicularly.

56. (New) A method according to claim 55, wherein, in each of the first plane of incidence and the second plane of incidence, the illumination of the pattern with light is substantially blocked.

57. (New) A method according to claim 55 or 56, wherein the predetermined plane of incidence is defined with an angle of about 45 degrees with respect to one of the first and second directions.

58. (New) In a method of imaging a fine pattern having linear features each extending in a predetermined direction, wherein the pattern is illuminated with light obliquely with respect to the pattern, the improvements residing in that:

the illumination of the pattern with light along a path in a plane of incidence including the predetermined direction is substantially blocked; and

the pattern is illuminated with light along a pair of paths which are symmetrical with each other with respect to the plane of incidence.

59. (New) In a method of manufacturing microdevices wherein a fine pattern having linear features each extending in a predetermined direction is illuminated with light obliquely with respect to the pattern and wherein the illuminated pattern is imaged and printed on a workpiece, the improvements residing in that:

the illumination of the pattern with light along a path in a plane of incidence including the predetermined direction is substantially blocked; and

the pattern is illuminated with light along a pair of paths which are symmetrical with each other with respect to the plane of incidence.

60. (New) An illumination method in image projection, for illuminating a fine pattern of an original, characterized by:

providing a light intensity distribution having decreased intensity portions at a center thereof and on first and second orthogonal axes with respect to which the original is to be placed.

61. (New) A method according to claim 60, wherein the strength at each of the decreased intensity portions is decreased to about zero.

62. (New) An illumination method in image projection, for obliquely illuminating with light a fine pattern of an original placed with reference to first and second orthogonal axes, characterized in that:

the strength of illumination of the pattern in a first plane of incidence including the first axis and the strength of illumination of the pattern in a second plane of incidence including the

second axis are made lower than that in a third plane of incidence other than the first and second planes.

63. (New) A method according to claim 62, wherein the illumination of the pattern along each of the first and second planes is substantially blocked.

64. (New) A microdevice manufactured in accordance with a method as defined in any one of claims 42-45, 47-50, 52, 53, 55, 56, 58, 59 and 60-63.

65. (New) A microdevice manufactured in accordance with a method as defined in claim 46.

66. (New) A microdevice manufactured in accordance with a method as defined in claim 51.

67. (New) A microdevice manufactured in accordance with a method as defined in claim 54.

68. (New) A microdevice manufactured in accordance with a method as defined in claim 57.

69. (New) An illumination method in image projection, for illuminating a pattern of an original, characterized by:

providing a light intensity distribution having increased intensity portions relative to a portion including a center and first and second orthogonal axes with respect to which the original is to be placed.

70. (New) A method for forming on a substrate an image of a pattern having components along orthogonal first and second directions, said method comprising:

illuminating the pattern with light having increased light intensity distribution within four sections relative to first and second axes, the first and second axes being defined to intersect with each other at a center and defined along the first and second directions, respectively; and

projecting the image of the pattern on the substrate.

71. (New) A method for forming on a substrate an image of a pattern having components along orthogonal first and second directions, said method comprising:

illuminating the pattern with light having increased light intensity distribution relative to, and within areas outside of, a cross-like portion defined to intersect at a center and defined along the first and second directions; and

projecting the image of the pattern on the substrate.

72. (New) An illumination method in image projection, for illuminating a pattern having linear features extending in a predetermined direction, characterized by:

illuminating the pattern; and

providing a light intensity distribution having increased light intensity portions relative to a portion corresponding to a path in a plane of incidence including the predetermined direction.

73. (New) A method according to claim 70, further comprising relatively moving said projected image and said substrate along an optical axis of a projection system during exposure of said substrate.

74. (New) A method according to claim 71, further comprising relatively moving said projected image and said substrate along an optical axis of a projection system during exposure of said substrate.

75. (New) A method of exposing a substrate with a pattern, comprising the steps of:

illuminating the pattern with light from an off-axis illumination source positioned in a first quadrant defined by orthogonal first and second axes that intersect each other at an optical axis of an illumination system;

switching the off-axis illumination source from the first quadrant to a second quadrant defined by the orthogonal first and second axes; and

illuminating the pattern with light from the off-axis illumination source in the second quadrant.

76. (New) A method according to claim 75, wherein light from the off-axis illumination source is prevented from reaching said substrate during the switching step.

77. (New) A method according to claim 75, wherein said off-axis illumination source is positioned in said first quadrant, said second quadrant, a third quadrant defined by the orthogonal first and second axes and a fourth quadrant defined by the orthogonal first and second axes to expose said substrate with the illuminated pattern.

78. (New) A method according to claim 75, wherein a plurality of switching operations of said off-axis illumination source to said first and second quadrants are effected every time said pattern is illuminated with a predetermined light quantity or for a predetermined period of time.

79. (New) A method according to claim 75, wherein the position of said off-axis illumination source in each of said first and second quadrants is determined so that an 0-order diffracted beam and one first-order diffracted beam produced from said pattern by the irradiation of light from said off-axis illumination source pass through positions having substantially equal distances from an optical axis of a projection system.

80. (New) A method according to claim 75, wherein said pattern has components along orthogonal first and second directions, and the position of said off-axis illumination source in each of said first and second quadrants is determined so that an 0-order diffracted beam produced from the components, one first-order diffracted beam produced from the component along the first direction and one first-order diffracted beam produced from the component along the second

direction by the irradiation of light from said off-axis illumination source pass through positions having substantially equal distances from an optical axis of a projection system.

81. (New) A method according to claim 75, wherein said first and second quadrants are selected among four quadrants defined by said first and second axes so that an 0-order diffracted beam produced from said pattern by the irradiation of light from said off-axis illumination source in said first quadrant is directed to said substrate through a same optical path of a projection system as one first-order diffracted beam produced from said pattern by the irradiation of light from said off-axis illumination source in said second quadrant.

82. (New) An exposure method comprising the steps of:

illuminating a mask with light from a secondary light source having a decreased intensity portion on an optical axis of an illumination system;

changing a first intensity distribution of the secondary light source to a second intensity distribution; and

illuminating the mask with light from the secondary light source having the second intensity distribution, wherein a substrate is exposed with the mask illuminated with light from the secondary light source having the first and second intensity distributions.

83. (New) A method according to claim 82, wherein said second intensity distribution is increased within one quadrant defined by orthogonal first and second axes that intersect each other at said optical axis relative to a portion on said optical axis.

84. (New) A method according to claim 83, wherein said first intensity distribution is increased within another quadrant defined by said first and second axes relative to said decreased intensity portion on said optical axis.

85. (New) A method of exposing a substrate with a pattern having components along first and second directions, the method comprising the steps of:

arranging a stop having four off-axis apertures in an illumination system that illuminates the pattern with light from the apertures, the four off-axis apertures being divided by axes defined along the first and second directions; and

projecting an image of the pattern on the substrate.

86. (New) A method according to claim 85, further comprising the step of relatively moving said projected image and said substrate along an optical axis of a projection system during exposure of said substrate.

87. (New) A method according to claim 60, wherein the fine pattern has features extending along the first and second orthogonal axes.

88. (New) A method according to claim 62, wherein the fine pattern has features extending along the first and second orthogonal axes.

89. (New) A method according to claim 69, wherein the pattern has features extending along the first and second orthogonal axes.

90. (New) An imaging method for imaging a fine pattern having linear features extending along orthogonal first and second directions, said method comprising:

providing a light source having decreased intensity portions at a center thereof and along first and second axes defined to intersect with each other at the center and defined along the first and second directions, respectively; and

illuminating the pattern with light from the light source, wherein the light source comprises four sections having substantially the same light intensity and being distributed in four quadrants defined by the center and the first and second axes, and wherein the four sections are disposed in an angularly symmetrical relationship with respect to the center.

91. (New) In a microdevice manufacturing method including a step for imaging on a workpiece a fine pattern having linear features extending along orthogonal first and second directions to print the fine pattern on the workpiece, the improvements comprising:

providing a light source having decreased intensity portions at a center thereof and on first and second axes defined to intersect with each other at the center and defined along the first and second directions, respectively; and

illuminating the pattern with light from the light source, wherein the light source comprises four sections having substantially the same light intensity and being distributed in four quadrants defined by the center and the first and second axes, and wherein the four sections are disposed in an angularly symmetrical relationship with respect to the center.

92. (New) A method according to claim 52, wherein the strength of illumination of the pattern along an entirety of the first direction and the strength of illumination of the pattern along an entirety of the second direction are made lower than that in the third plane of incidence.